

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) A titanium based carbonitride alloy comprising hard constituents with undissolved Ti(C,N) cores, the alloy further comprising 9-14 at% Co, 1-3 at% Nb, 3-8 at% W, C and N having a C/(N+C) ratio of 0.50-0.75, and wherein the amount of undissolved Ti(C,N) cores is between 26 and 37 vol% of the hard constituents and the balance being one or more complex carbonitride phases.

2. (Original) The alloy according to claim 1, wherein the alloy contains 10-13 at% Co.

3. (Original) The alloy according to claim 1, wherein the alloy contains 1.5-2.5 at% Nb.

4. (Original) The alloy according to claim 1, wherein the alloy contains 3-4 at% W.

5. (Original) The alloy according to claim 1, wherein the amount of undissolved Ti(C,N) cores is between 27 and 35 vol% of the hard constituents, the balance being one or more complex carbonitride phases.

6. (Original) A method of manufacturing a titanium-based carbonitride alloy comprising hard constituents with undissolved Ti(C,N) cores, the method comprising: mixing hard constituent powders of $\text{TiC}_x\text{N}_{1-x}$, x having a value of 0.46-0.70, NbC and WC with powder of Co, pressing into bodies of desired shape and sintered in a N_2 -CO-Ar atmosphere at a temperature in the range 1370-1500 °C. for 1.5-2h in order to obtain the desired amount of undissolved Ti(C,N) cores the amount of Ti(C,N) powder is 50-70 wt-% of the powder mixture, its grain size is 1-3 μm and the sintering temperature and sintering time are chosen to give an amount of undissolved Ti(C,N) cores between 26 and 37 vol% of the hard constituents.

7. (New) A titanium based carbonitride alloy consisting of:

9-14 at% Co;

1-<3 at% Nb;

3-8 at% W;

C and N having a $\text{C}/(\text{N}+\text{C})$ ratio of 0.50-0.75;

hard constituents with undissolved Ti(C,N) cores, wherein the amount of undissolved Ti(C,N) cores is between 26 and 37 vol% of the hard constituents and the balance being one or more complex carbonitride phases; and
balance Ti.

8. (New) The alloy according to claim 7, wherein the alloy contains 10-13 at% Co.

9. (New) The alloy according to claim 7, wherein the alloy contains 1.5-2.5 at% Nb.

10. (New) The alloy according to claim 7, wherein the alloy contains 3-4 at% W.
11. (New) The alloy according to claim 7, wherein the amount of undissolved Ti(C,N) cores is between 27 and 35 vol% of the hard constituents.
12. (New) The alloy according to claim 7, wherein the Ti(C,N) cores contain $\text{TiC}_x\text{N}_{1-x}$ and a C/(C+N) ratio in the Ti(C,N) cores is 0.46-0.70.